

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 03 OCT 2005

WIPO



PCT

Applicant's or agent's file reference 03OP-104PCT	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/KR2003/002244</b>	International filing date (day/month/year) <b>23 OCTOBER 2003 (23.10.2003)</b>	Priority date (day/month/year) 07 JUNE 2003 (07.06.2003)
International Patent Classification (IPC) or national classification and IPC <b>IPC7 G09F 11/23</b>		
Applicant <b>MYMEDIA CO., LTD. et al</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:
- I ☒ Basis of the report
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand <b>08 JUNE 2004 (08.06.2004)</b>	Date of completion of this report 02 SEPTEMBER 2005 (02.09.2005)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer KWON, In Sup Telephone No. 82-42-481-5570 

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR2003/002244

## I: Basis of the report

### 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement) under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language English which is

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☒ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION

International application No.

PCT/KR2003/002244

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1 - 12	YES
	Claims	none	NO
Inventive step (IS)	Claims	1 - 12	YES
	Claims	none	NO
Industrial applicability (IA)	Claims	1 - 12	YES
	Claims	none	NO

### 2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

D1 : JP 06-214509 A  
D2 : KR 20-0257301 Y1  
D3 : KR 2002-0039448 A  
D4 : KR 2000-0012359 U  
D5 : US 6094849 A

#### 1. Novelty

The present invention relates to a rotary electronic display board apparatus and a method for driving a rotary electronic display board. Claim 1 is characterized by including an origin pulse generator for generating an origin pulse whenever the revolution solid rotates once and a line pulse generator for calculating a rotation period of the revolution solid using the origin pulse, and generating a plurality of line pulses each having a period corresponding to a division result value which is acquired by dividing the rotation period of the revolution solid by the number of virtual areas separated along the turning radius of the revolution solid. Claim 11 relates to a method including a step of generating said origin pulse and line pulse.

Claims 2-10 dependent on claim 1 and claim 12 dependent on claim 11 define the technical feature of claims 1 and 11 in greater detail.

D1-D4 relate to a display device using after-image effect generated while rotating light emitting diode(LED). D5 discloses a display device, which does not use the after-image effect.

None of the cited prior art documents teaches or suggests any constituents corresponding to the origin pulse generator and the line pulse generator of the present claims 1 and 11. Thus claims 1 and 11 are novel and claims 2-10, 12 dependent on claims 1 and 11 are also novel.

(Continued on Supplemental Sheet.)

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR2003/002244

## Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of:

BOX V.

### 2. Inventive Step

D1 and D2 are the most relevant prior art documents to the present invention.

D1 and D2 are characterized by holding the rotating speed at a reference value by controlling the motor when the rotating speed of the motor is changed and thus the rotation period is also changed.

However, the present invention is different from D1 and D2 in switching on/off the LED according to the line pulse generated in a periodic cycle corresponding to the quotient resulting from division of the changed rotating period of the revolution solid by the number of virtual areas.

Therefore, the subject matter of claims 1 and 11 is inventive since it is different from the disclosure of D1 and D2.

D3-D5 do not disclose the technical feature of claims 1 and 11. Accordingly claims 1 and 11 are also inventive compared with D3-D5.

Claims 2-10, 12 dependent on claims 1 and 11 are thus inventive.

### 3. INDUSTRIAL APPLICABILITY

All the claims are considered to be industrially applicable.